

**TASK ORDER SCOPE OF WORK**  
**Integrated Training Area Management (ITAM)**  
**Geographic Information System (GIS)**  
**Regional Support Centers (RSC)**

**CONTRACT NUMBER: TBD**

**CONTRACTOR: TBD**

**TASK ORDER: TBD**

**1.0 SCOPE.** The scope of this delivery order is limited to GIS support for the Army installations that are currently listed as categories I, II, III, and IV, and to HQDA and MACOM ITAM components. The specific installations within this list, and their corresponding ITAM Category are under constant review and revision as missions and tasks change. The Government will provide regular updates on changes that may occur to the status of the supported installations under this delivery order.

**1.1 BACKGROUND.** The US Army Environmental Center (USAEC) provides environmental technical support to the Integrated Training Area Management (ITAM) Program in accordance with AR 350-4 ITAM. Geographic Information Systems (GIS) is ITAM's foundation support element and provides spatial data and applications support for all ITAM components (LCTA, LRAM, EA, TRI) to ensure ITAM provides effective mission support .

The ITAM GIS Program strives to achieve information excellence as a tenet of range sustainment. ITAM GIS will achieve information excellence by delivering the best, most accurate, complete data sets through user-friendly GIS products and applications, supported by ITAM GIS technicians trained in the most current releases of GIS software and spatial data standards. The ITAM GIS Regional Support Centers (RSCs) provide focused development of standard GIS databases, central GIS product and applications support to ITAM and other installation mission support offices, adherence to Federal, DoD and Army spatial data standards, and information delivery through all media: paper and digital maps, internet applications, and analysis. The ITAM GIS program participates in Army Enterprise GIS initiatives that eliminate redundancies in data development and applications, and reduce costs for these items to the ITAM program. All ITAM GIS components have been supported through the ITAM GIS Regional Support Centers (RSC's) continuously since May 1998. The current configuration for the RSC system is a two-center operation; the Western RSC (WRSC) at Colorado State University, and the Eastern RSC (ERSC) at Fort A.P. Hill, VA. The primary RSC function is to ensure a standard ITAM GIS capability exists at all ITAM installations, and to gain efficiencies through standardization and geographically centralized support.

**1.2 OBJECTIVE.** The objective of this task order is to provide the ITAM program with GIS support to installations, MACOMs, and HQDA through the operation of two GIS Regional Support Centers.

**2.0 APPLICABLE DOCUMENTS.** The following documents will be provided by the Government, or are available for downloading from Internet locations where indicated below:

- 2.1 Memorandum, DAIM-MD, 16 Oct 2001, Subject: Data Standards for Computer Aided Drafting and Design (CADD), Geographic Information Systems (GIS) and Related Technologies.
  - 2.2 AR 350-4 Integrated Training Area Management. Downloadable from the ITAM web page: <http://www.army-itam.com>
  - 2.3 ITAM Procedural Manual, Implementing Draft, August 1999. Downloadable from the ITAM web page.
  - 2.4 Spatial Data Standards for Facilities, Infrastructure, and Environment (SDS-FIE) Version 2.2 (or higher). Downloadable from the CADD/GIS Center web page: <http://www.tsc.wes.army.mil>
  - 2.5 Executive Order 12906. Downloadable from the Federal Geographic Data Committee (FGDC) web page: <http://www.fgdc.gov>
  - 2.6 Federal Geographic Data Committee (FGDC) Content Standards for Digital Geospatial Metadata. Downloadable from the FGDC web page.
  - 2.7 ITAM GIS Standard Operating Procedures
  - 2.8 ITAM GIS Tracker Database
  - 2.9 Army Training and Testing Area Carrying Capacity (ATTACC) Handbook.
  - 2.10 ATTACC Land Condition Module (LCM) version 2.0.
  - 2.11 AR 385-63, Army Range Safety
  - 2.12 AR 210-21, Ranges and Training
  - 2.13 Army Knowledge Management Guidance Memorandum Number One, 8 Aug 01
  - 2.14 Army Knowledge Management Guidance Memorandum Number Two, Implementation Guidance, 1 Aug 02
  - 2.15 AKM Interface Control Document Version 4.2 or most recent release.
  - 2.16 AR 25-1, Army Information Management
  - 2.17 AR 380-19, Army Information Systems Security
- 3.0 **SPECIFIC TASKS.** In accordance with Section C, paragraph 3.1.5 of the Basic contract, the Contractor, as an independent contractor and not as an agent of the Government, shall provide the necessary resources (except those identified as government furnished property or assistance) to support the work necessary to operate for twelve (12) months two (2) ITAM GIS RSC's. Support shall include GIS technical support to all Army installations and sub-installations participating in the ITAM Program, and GIS support for MACOM's and HQDA ITAM offices. There are 115 ITAM installations that encompass 125 installations, sub-installations, and training sites. The GIS support provided shall include GIS data development, GIS data analysis and output, Geospatial Information and Services Website development and implementation, spatial data standards support, data repository, central GIS training support, central GIS hardware and software procurement support, and reporting. There are two levels of installation support provided: (1) Full Support (or installations with no on-site ITAM GIS operator (mostly ITAM Category III and IV installations); and (2) Partial Support for installations with on-site ITAM GIS operator (mostly ITAM Category I and II installations). A list of supported installations, their support status and current RSC affiliation is at Attachment A, and a summary of level of support provided to the 125 ITAM sites supported under this contract are below. The installation support status will change at some installations as they hire or lose GIS on-site GIS support. Attachment A reflects the current support status.

	Level of Support		
RSC	Partial	Full	Total
East	31	34	65
West	36	24	60
Total	67	58	125

The overall level of deliverables of all tasks will not change due to changes in installation support status; however it will be necessary to review the support status at the quarterly in-progress reviews and adjust support levels between installations within individual MACOMs to accommodate any changes in support status, or changes in support directed by the Government for any installation or installations. The Contractor shall perform the following tasks:

### 3.1 TASK 1. COORDINATION MEETINGS/MANAGEMENT PLAN.

- 3.1.1 Initial Coordination Meeting. The Contractor shall attend an initial coordination meeting at USAEC to review the requirements within this Scope of Work (SOW), resolve any questions on timelines or deliverables, and define specific requirements for the draft Management Plan, and monthly and quarterly reporting procedures. The meeting shall be completed within ten (10) days after contract award.
- 3.1.2 Management Plan/Final Coordination Meeting. Following completion of the Initial Coordination Meeting, the Contractor shall prepare a Draft Management Plan describing the management approach to performing the work required under this delivery order. The Draft Plan shall include an organizational diagram that specifically identifies key personnel for the overall contract and for each RSC, support staff, and subcontractors, approach to accomplishing each task including personnel and their documented training and professional experience required to support the task and sub-tasks, a detailed QA/QC plan, approach to automating tracking and reporting of all hours, expenditures, and deliverables to specific tasks and priorities, monthly and quarterly report formats and procedures, and a complete contract timeline showing the specific dates for all required deliverables including continuation of current RSC GIS support efforts within 10 days of contract award, meetings, and reports. The draft plan shall be submitted to the USAEC within ten (10) days after the Initial Coordination Meeting (twenty days after contract award). The Government will review and provide written revisions within ten (10) days of receiving the Draft plan (thirty days after contract award), and the Contractor shall prepare a Final Management plan incorporating Government comments and present to the Government at a Final Coordination Meeting within ten (10) days of receiving the Government comments (forty days after contract award). The Final Coordination Meeting shall be held at the USAEC.

- 3.2 TASK 2. OPERATIONS. The Contractor shall conduct RSC operations to support ITAM GIS requirements at HQDA, MACOM and Installations, and provide ITAM enterprise-wide geospatial information and services. This technical support consists of implementation of standards, data development and acquisition, training support, and GIS applications and analysis. This support shall adhere to the following operational guidelines:

- 3.2.1 Priorities of Operation. The RSC's shall conduct a number of installation-specific operations and headquarters support functions under this delivery order. These operations shall be conducted in a prioritized manner to ensure delivery of baseline products at the installations. Specific deliverables and tasks are outlined within this Statement of Work, but shall follow the following priorities:
  - 3.2.1.1 Range Facilities Management Support System (RFMSS) data support.
  - 3.2.1.2 Fort X Special maps and associated electronic media. At least 25% of all fully-supported ITAM installations shall have completed Fort X Special maps each quarter of this task order.
  - 3.2.1.3 Installation visualization data.
  - 3.2.1.4 Installation 1-n prioritized data requirements. These Installation data requirements shall be approved by the Government and must directly support USC Title 10 training mission and the programmatic HQDA ITAM training mission.
  - 3.2.1.5 ITAM Geographic Information and Services (IGI&S) Website and services.
  - 3.2.1.6 Development, HQ Support, and RSC Operational tasks shall be addressed and prioritized separately from the previous five installation support tasks.
- 3.2.2 Capabilities. The Contractor shall establish and maintain the RSC's as the ITAM Program GIS center of expertise in GIS software applications, Federal spatial data standards, development and testing of custom GIS tools, and geodatabase design. This shall include FGDC standards and the SDS-FIE. RSC employees shall be trained and maintain capabilities to implement the most current versions of these standards, and trained and maintain capabilities to operate the most current releases of GIS software. RSC employees shall be able to develop and implement custom GIS tools programmatically to assist the ITAM GIS Program in efficient map production and data conversion. RSC employees shall be trained and maintain skills necessary to operate software within a relational database formatted to SDS-FIE standards, and to provide implementation support to installations, MACOM's and HQDA offices in these applications and databases.
- 3.2.3 Scope. The Contractor shall establish the RSC's as the central source of information, technical support, training support, data acquisition, and management support to the entire ITAM GIS community, and shall provide support to all ITAM installations, MACOM, and HQDA offices. The RSC's shall provide central reporting capabilities for the ITAM GIS Program, including evaluation and resourcing requirements, and central procurement and training coordination. The RSC's shall seek to identify and provide the ITAM Program efficiencies in all GIS areas through centrally coordinated efforts.
- 3.2.4 Configuration. The Contractor shall operate two Regional Support Centers providing capabilities to conduct all aspects of GIS development and support required under this Delivery Order. This shall include provision of facilities for conducting periodic training of ITAM GIS personnel. RSC's shall maintain redundant and interoperable systems, databases, and support capabilities to ensure all tasks can be fully supported at each RSC location.
- 3.2.5 Work Distribution. The Contractor shall apportion installation support proportionate to the number, size, and complexity of installations supported by that RSC. MACOM and HQDA support tasks shall be apportioned proportionate to the geographic location of the RSC to the supported offices. All other tasks

shall be evenly distributed between the RSC's to ensure redundant and standard capabilities and support.

- 3.2.5. Data Standards and System Security. The Contractor shall adhere to the spatial data standards of the documents referenced in Paragraph 2. The Contractor shall lead efforts for integration of ITAM spatial data sets into SDS-FIE schema and versions through cooperation in Government-sponsored meetings with the CADD/GIS Center at Waterways Experiment Station. The Contractor shall comply with DoD and Army policies and procedures for information system and data security.
- 3.2.6. Provide High-Quality Products. All deliverables under this contract, including paper maps, electronic maps and web-services, web pages, database interfaces and reports, monthly reports, quarterly reports, and briefing and training materials shall be internally checked for accuracy, formatting, and appearance before submitting to the Government. All deliverables shall be high-quality and contain minimum errors, and all reports and briefings must be presentation-quality. The Contractor shall utilize personnel with documented training and/or professional experience and expertise in database design, GIS, cartography, graphics, publishing, web design, and other expertise as needed to conduct all tasks, and prepare and review deliverables to ensure high quality products.

- 3.3. **TAKS 3. INSTALLATION PRIORITIES AND TRACKING.** The Contractor shall adhere to the priorities established in paragraph 3.2.1, and incorporate these into installation-specific data and map product priorities to be tracked in the ITAM Tracker, and summarized in monthly and quarterly reports. All work performed under this contract shall be identified to and tracked against these specific priorities.

- 3.3.1. The Contractor shall prepare a prioritized data development list based on evaluation of each fully supported data set against requirements to support maps and applications defined in Attachment B. The Contractor shall produce a shortfall report in the form of a prioritized and standard table that defines the specific data layer, attribute, accuracy, metadata, and data format needs against the requirement. Following completion of this shortfall report, the Contractor shall contact the installation ITAM POC to identify any further map or analytical requirements other than identified in this SOW, identify the data requirements to support those against the existing data set, and include any shortfalls in a final evaluation. The Installation 1-n requirements as defined in paragraph 3.2.1.4 shall be approved by the Government and must directly support USC Title 10 training mission and the programmatic HQDA ITAM training mission. The Contractor shall then prepare an evaluation report that specifically outlines prioritized data development needs to that are directly linked to SOW mapping and analysis requirements, and it shall include MACOM and HQDA rollups, graphics and slides that summarize these requirements. The Contractor shall deliver a draft evaluation report within forty-five (45) days following contract award. The Government will evaluate and provide any comments and corrections within fifteen (15) days of receipt, and the Contractor shall produce a final report within fifteen (15) days following the receipt of Government comments. All identified priorities shall support the development of RFMSS (paragraph 3.2.1.1) and Fort X Special data and maps (paragraph 3.2.1.2) at the rate of twenty-five percent (25%) per quarter, or faster, to ensure by the end of this task order every fully supported ITAM installation will have completed Fort X Special maps. Prior to the completion and approval of this report the Contractor shall only conduct data development and map production that specifically supports paragraphs 3.2.1, 3.2.2, or 3.2.3 unless specifically requested and approved by the Government.

- 3.3.2. ITAM Tracking and Reporting. The Contractor shall compile all data priority information into the ITAM GIS TRACKER relational database that shall be accessible to the Government through an Internet-accessible interface that provides the ability to produce reports and charts depicting progress towards completion of requirements. The Contractor shall track all expenditures for data development and acquisition against the data development priorities and provide these summaries in monthly and quarterly reports, and make them accessible through the Internet.
- 3.4. **TASK 4. GIS SUPPORT TASKS.** The focus of this support is the delivery of standard products and information to the ITAM community through paper and electronic formats, and through the IGI&S website. All GIS support tasks shall be initiated within ten (10) days after award of delivery order and ensure continuation and continuity with current RSC GIS support functions.
- 3.4.1. Data Development and Acquisition. The Contractor shall conduct all tasks required for developing geospatial data and editing or updating of existing data. Priorities for data development and acquisition shall be in strict accordance with those established under paragraphs 3.2.1 and 3.3. All geospatial data created or acquired under this delivery order shall include all required attribute data as defined coordination with the Government and the ITAM GIS User Working Group, be documented according to the FGDC standard for metadata, comply with the Spatial Data Standard for Facilities, Infrastructure and Environment (SDS-FIE), and follow quality standards outlined in the ITAM GIS Standard Operating Procedure. All changes to installation geospatial databases shall be recorded in the ITAM GIS Tracker Database, and directly linked to the priorities outlined in Task 3 (paragraph 3.3). Database development and acquisition shall be limited to fully supported installations, or partially supported installations for specific layers in support of efforts approved by the Government.
- 3.4.1.1. Data Development. The Contractor shall develop geospatial data through manual digitization, scanning, image processing and classification, aerial photograph interpretation, Global Positioning System (GPS) field surveys, acquisition and processing of data from other government agencies and sources, and conversion from existing digital formats to formats compatible with SDS-FIS GIS standards. This task shall include reproduction, media, and shipping charges incurred when procuring existing data sets. The Contractor shall edit and update existing ITAM GIS data as required to bring the data into compliance with FGDC, SDS-FIE, and ITAM GIS SOP standards. This shall include correction of location data, correcting or adding attributes, conversion between software formats, conversion of geo-referencing systems, and data compressions.
- 3.4.1.2. Data Acquisition. The Contractor shall acquire data as needed to support data development and mapping for fully supported installations, and to support installation visualization for all ITAM installations. Data procurement support shall include locating and acquisition of existing data from Department of Defense, Army, and Federal agencies. This task shall include reproduction, media, and shipping charges incurred when procuring existing data sets. It is anticipated data acquisition costs will be approximately two hundred fifty dollars (\$250) per ITAM installation.
- 3.4.2. Map Production. The Contractor shall ensure that all maps delivered under this Task Order are consistent between RSCs and based on standard military cartographic layout (i.e. NIMA Military Installations Maps). The Contractor shall

produce maps in accordance with the priorities and schedules outlined in paragraphs 3.2.1 and 3.3. The primary focus of this task shall be the creation of Fort X Specials for every fully supported installation during the period of performance, at least 25% per quarter. The Contractor shall export all maps produced to portable document format (.pdf), publish them in the Map Gallery section of the ITAM Geographic Information and Services (GI&S) website, and publish approved maps and layers to the Interactive Mapper section of the GI&S website. The installation Fort X Special and visualization layers shall also be published to CD and utilize ArcReader or similar approved viewing software. Layouts and views on these CD's shall include summaries of the installation, its geographic and political location, headquarters organization, supported units, and basic statistics on the installation and its ranges and training areas. The Contractor shall propose draft layouts, images, report formats, and software to be used on the CD versions of maps within sixty (60) days of contract award. The Government will provide comments within ten (10) days and the Contractor shall provide final layouts within ten (10) days of receiving Government Comments. Large format paper copy maps shall be limited to ten (10) copies per map per installation unless approved by the Government. The Contractor shall utilize print service companies that specialize in color separate printing for larger runs of specified maps, including Fort X Specials. Large runs of maps shall not be executed at the RSCs using plotters and/or printers.

- 3.4.3. Spatial Analysis. The Contractor shall define and conduct geospatial analysis functions required to support installation ITAM missions. These shall include line-of-sight, surface danger zone, three-dimensional terrain modeling, and soil erosion risks and status. The Contractor shall define installation-specific GIS analysis requirements and priorities with the installation ITAM POC. The GIS analysis shall be approved by the Government and must directly support USC Title 10 training mission and the programmatic HQDA ITAM training mission. All analytical projects that the Contractor projects to exceed forty (40) hours shall be pre-coordinated with the Government. The Contractor shall develop and conduct analysis under this task utilizing the most current versions of GIS software, and all customizations shall belong to the Government. All analysis procedures conducted shall be logged and reported. GIS Analysis development tasks shall be conducted for all fully supported installations identified in Attachment A.
- 3.4.4. Technical Support. The Contractor shall provide ITAM GIS technical assistance for data development, database maintenance, data analysis, map configuration and output, systems configuration and hardware/software specifications, data sources and acquisition procedures, and implementation of geospatial data standards (FGDC, SDS-FIE, and ITAM SOP). Technical assistance shall be limited to data and applications directly in support of the installation ITAM Program, and shall include technical support for GIS issues for Land Condition Trend Analysis (LCTA), Land Rehabilitation and Maintenance (LRAM), Environmental Awareness (EA), and Training Requirements Integration (TRI). The technical support must support USC Title 10 training mission and the programmatic HQDA ITAM training mission. Technical support requests shall be received through phone, facsimile, or email. All incoming request shall be logged, progress tracked, and completion recorded and reported. Technical support shall be provided to all ITAM installations. The Contractor shall update the existing pamphlet that describes the RSC locations, POC's, contact information, and kinds of products and support available to supported ITAM installations. This pamphlet shall be suitable for distribution at meetings and conferences, a digital copy of the information pamphlet shall be posted on the IGI&S web page, and up to four hundred (400) color copies shall be provided. The Contractor shall provide a draft of this pamphlet within forty-five (45) days of contract award. The Government will provide comments within ten (10) days,

and the Contractor shall produce final copies within ten (10) days of receiving Government comments. The Contractor shall manage the ITAM GIS List Server as a technical support function.

**3.5. TASK 5. GIS TRAINING.**

- 3.5.1. ITAM/NGB GIS Training Program Administration. The Contractor shall coordinate the operation of the ITAM/NGB GIS Training Program, to include website support and logistics planning. The Contractor shall track and report training course attendance to the Government.
- 3.5.2. ITAM GIS. The Contractor shall prepare a training curriculum and materials that provides two (2) modules: Module 1. An overview of the ITAM GIS Program and the ITAM Community incorporating the ITAM Procedural manual, the ITAM CCB Process and the ITAM GIS User Working Group (UWG), Executive Management Committee (EMC), Program Management Review (PMR), GIS as a foundational support element of ITAM, ITAM GIS Program goals, and ITAM Workshop GIS Day, and ITAM Bridge Article contributions; and Module 2. ITAM GIS Program. This module targets ITAM GIS coordinators and shall incorporate an introduction to ITAM GIS, geospatial data standards (FGDC and SDS-FIE), ITAM GIS cartographic standards and tools, ITAM GIS Standard Operating Procedures, the ITAM GIS Tracker Database, and reporting procedures through the RSC. standards and tools to include Geospatial Data Standards, ITAM GIS cartographic standards and tools, ITAM GI&S website and Interactive Mapper, CD-based mapping tools, ITAM GIS Standard Operating Procedures, and ITAM GIS Tracker Database and Reporting. The Contractor shall provide a draft version of this training within sixty (60) days of contract award. The Government will review and provide comments within 15 days, and the Contractor shall finalize and provide final copy within 15 days. The products shall include briefing charts, sample data sets and layouts, and support documentation. This training shall be the core curriculum for new ITAM GIS Coordinator indoctrination training and be available at conferences and on site as approved by the Government. The Contractor shall conduct training of individual installation GIS technicians within thirty (30) days of award of contracts for these positions or as identified by the USAEC.

- 3.6. **TASK 6. ITAM GIS REPOSITORY.** The Contractor shall maintain a repository or duplicate linked or regularly synchronized repositories for all ITAM GIS data and metadata collected, developed, and maintained in support of ITAM GIS and related ITAM projects to include Active and Inactive Range Inventory data and tables. The database shall be compliant with standards (FGDC and SDS-FIE), maintained current and complete, and be accessible to the Government. The USAEC will provide direction on Government offices that may be granted access to the database.

- 3.7. **TASK 7. ITAM GEOGRAPHIC INFORMATION AND SERVICES (GI&S) WEBSITE.** The Contractor shall design, build, and maintain an ITAM Geographic Information and Services (GI&S) website that will be integrated with the ITAM website.

- 3.7.1. GI&S Implementation Plan. The Contractor shall design the ITAM GI&S website to be integrated with the ITAM website on a server with a .mil domain, and using the Army Knowledge Online (AKO) single-sign on procedures in accordance with the Army Knowledge Management Interface Control Document (AKM ICD). This website shall incorporate server-side technology (such as Active Server Pages) and accommodate dynamic page development. The Contractor shall facilitate a



conference with Government, ITAM Website developing contractor, and ITAM Website Hosting contractor within thirty (30) days of contract award. This conference shall include two phases: one with the ITAM GIS UWG to define functional requirements and the second with the all groups previously listed to define standards and operational procedures. Minimum functional requirements shall include a map gallery, interactive mapper initially consisting of the current MAGIC 3.0 application, forum for posting ITAM GIS tools and solutions, ITAM/NGB GIS Training page, and GIS contracting support and templates. The Contractor shall present a draft web site implementation plan, which (a) outlines the design, layout, architecture, and database, testing and acceptance plan in accordance with Army and DoD requirements and in coordination with the ITAM homepage, and (b) include a prototype to the Government within sixty (60) days of contract award. The Government will evaluate and provide written comments within fifteen (15) days. The Contractor shall present a final GI&S website implementation plan to the Government for approval within fifteen (15) days.

- 3.7.2. GI&S Construction. The Contractor shall build, test, certify and implement the website and its supporting database according to the approved plan from 3.6.1 within ninety (90) days.
- 3.7.3. GI&S Database. The Contractor shall populate and maintain the database to support the map gallery, ITAM GIS Tools, contracting support, and interactive mapper and others as defined and approved by the Government. All database requirements to support the GI&S website shall be completed and operational by completion of task 3.7.2.
- 3.7.4. GI&S Administration and Maintenance. The Contractor shall update information in the GI&S database and ensure that the website is operable at all times.

- 3.8. **TASK 8. RANGE MAPPING AUTOMATION.** The Contractor shall develop and support tools that standardize and automate development of military installation maps and related features, and support all required DoD and Army testing, evaluation, and accreditations required to field these tools to installation.

- 3.8.1. Military Installation Map Tools (MIMT) and Templates. The Contractor shall modify existing ITAM military map tools that standardize map layouts, and automate map development process. This includes creation of an ArcGIS template, symbology set, and map surround element tools. The Contractor shall develop test and acceptance plans in accordance with DoD and Army certification, and coordinate and conduct all tasks required to complete certification or modify existing certifications to cover the automated map support tools. The Contractor shall develop all required documentation, and develop online help menus and publish these to the ITAM GI&S Website. The Contractor shall prepare a draft plan to document all aspects of the MIMT and testing protocol for Government approval within forty-five (45) days. The Government will provide comments within fifteen (15) days. The Contractor shall complete all development and testing according to the plan within one hundred twenty (120) days or as otherwise arranged and approved by the Government.
- 3.8.2. Range Support Tool Testing and Evaluation. The Contractor shall test and evaluate range support tools identified by the Government and in accordance with DoD and Army security and accreditation standards. This shall include, at a minimum, the Army Surface Danger Zone (SDZ) tool, Noise tool, and automated RFMSS database conversion tool. Testing shall not include submittal of certification or accreditation, and shall focus on functional evaluation to meet ITAM Program goals.

- 3.9. **TASK 9. MACOM/HQDA GIS SUPPORT.** The Contractor shall perform tasks required to provide GIS support to MACOM and HQDA offices.
- 3.9.1. **MACOM Support.** The Contractor shall provide GIS support to MACOM ITAM POC's including specialized map products in paper and digital formats, database queries, GIS database design, spatial data standards implementation, ITAM GIS applications support, training, and spatial analysis for all MACOM's in the ITAM Program. GIS products shall be derived from existing RSC data from currently or historically fully supported or full onsite support, as provided by the MACOM or supported installation or as released by the installation or MACOM from other sources including the Army Active/Inactive (A/I) Range Inventory. Support shall also be provided in accessing and utilizing ITAM applications and databases , and ITAM database standards including the SDS-FIE and FGDC. On site support shall be provided as required and as approved by the Government.
- 3.9.2. **HQDA Support.**
- 3.9.2.1. **Maps, Analysis, and Technical Support.** The Contractor shall provide GIS support to MACOM ITAM POC's including specialized map products in paper and digital formats, database queries, GIS database design, spatial data standards implementation, ITAM GIS applications support, training, and spatial analysis for USAEC, ATSC, and DCSOPS ITAM POC's. Support shall also be provided in accessing and utilizing ITAM applications and databases, and ITAM database standards including SDS-FIE and FGDC. On site support shall be provided as required and as approved by the Government, and shall include the establishment of an in-house GIS data viewing, mapping, and plotting capability at DAMO-TRS in coordination with the DCSOPS information technology support office.
- 3.9.2.2. **Workshop Support.** The Contractor shall prepare and conduct ITAM GIS Regional Support Center project status briefings, ITAM GIS Tools Training, and general GIS training at the Range and Training Land Program (RTLTP) Program Management Review (PMR) in May, 2003, the ESRI Annual Conference in July 2003, the ITAM Workshop and GIS Day in August, 2003, and the ESRI Defense User Group (DUG) in November 2003. The Contractor shall provide draft materials thirty (30) days prior to the specified workshops for Government review and approval. Materials developed for Task 3.5.2 shall be used where appropriate. This task shall also include the participation of RSC staff at the ITAM GIS User Working Group (UWG) meetings in August 2003, and in February of 2004, as well as participation in UWG teleconferences, document reviews, and recommendations.
- 3.10. **TASK 10. ATTACC SUPPORT.** The Contractor shall support the Army Testing and Training Area Carrying Capacity (ATTACC) program's implementation of its Land Condition Module (LCM). This shall include support for documentation, and development of LCM output on training sites designated and prioritized by the Government. Both RSC's shall be trained in LCM applications and participate in LCM support for installations identified under their geographic region of support.
- 3.10.1. **ATTACC LCM Documentation.** The Contractor shall maintain and update the ATTACC LCM Data Dictionary and LCM Procedures documents. This shall support efforts led by the U.S. Army Construction Engineering Research Laboratories (USACERL) as directed by the U.S. Army Environmental Center (AEC) in support of Army Training Support Center (ATSC) requirements. Documentation updates shall provide sufficient instruction to allow application of

the LCM by ITAM installation GIS programs. A draft of updated LCM documentation shall be provided within 30 days. The Government will provide comments within fifteen (15) days and the Contractor shall produce a final version within fifteen (15) days of receiving Government Comments.

3.10.2. ATTACC LCM Implementation. The Contractor shall support the development of LCM for a minimum of 8 ITAM installations per Attachment B. The Contractor shall acquire and collect necessary digital datasets to develop required LCM data layers. Descriptions of these data layers and their definitions can be found in Appendix E. in the Army Training and Testing Area Carrying Capacity Handbook. The data layers shall be created and digitized for the installation as a whole and by individual training area. The Contractor shall use the Natural Resource Conservation Service (NRCS) as the exclusive source for soils related data layers (K and T factors), and may request exceptions from the Government. The remaining data layers may be developed with data the Contractor has on hand, in coordination with the support installation and its Major Army Command (MACOM) or the Government. The Contractor shall complete required data layers & maps and LCM output for fully supported installations. The Contractor shall provide assistance to fully and partially supported installations on operating the LCM on an as needed basis (telephonic and e-mail). The Contractor shall deliver completed LCM output to the Government for all 8 referenced installations by 1 June 03. The Government will review and provide comments within fifteen (15) days, and the Contractor shall provide final LCM within fifteen (15) days after receiving Government comments.

3.10.3. After Action Review. The Contractor shall conduct an After Action Review no later than 30 November 2003. This review shall include examination of LCM data dictionary and operational procedures documents, and provide recommendations for incorporating lessons learned from LCM implementation into the LCM documentation. The Contractor shall provide draft revisions to LCM documentation within fifteen (15) days after the After Action Review. The Government will provide comments within fifteen (15) days and the Contractor shall complete revisions within fifteen (15) days after receiving Government comments.

3.10.4. ATTACC Training. Conduct ATTACC/LCM training at the ITAM Workshop. Training will include development of materials, handouts, and other support materials as needed.

3.11. **TASK 11. RECORD KEEPING AND REPORTING.** The Contractor shall log and track deliverables and progress on all tasks under this delivery order.

3.11.1. Monthly Status Reports (MSR). The Contractor shall submit monthly status reports (MSR's) showing the distribution of labor hours and costs associated with each task, ODC costs and detail report, and travel costs and detail report. A brief summary of accomplishments and issues by task shall also be provided. The Contractor shall prepare and present a draft MSR format at the Initial Coordination Meeting (paragraph 3.1.1), and incorporate modifications provided by the Government prior to the first MSR delivery. MSR's shall be delivered electronically to the Government on a regular monthly schedule as determined by date of contract award and coordinated with the Government. A monthly conference call between the Contractor RSC Project Managers and the Government shall be conducted two working days after delivery of each MSR. The Contractor shall record and report detailed minutes from each MSR conference call within two working days after the call, and track and report decisions and tasks generated from the calls.

3.11.2. Quarterly Reports and In-Progress Reviews (IPR's). The Contractor shall submit quarterly reports to provide specific details on the accomplishments of each task in this delivery order (paragraphs 3.1 through 3.10), document project execution problems, propose solutions to these problems to maintain cost and timelines, provide installation status report, MACOM roll ups, and HQDA roll ups. The Report formats shall follow that used by the existing ITAM RSC's, and shall be submitted electronically to the Government on a regular quarterly schedule as determined by date of contract award and coordinated with the Government. A quarterly In-Progress Review (IPR) meeting between the Contractor RSC Project Managers and the Government shall be conducted seven (7) working days after delivery of each Quarterly Report, and shall be conducted on an alternating basis on site at the Regional Support Centers. The Contractor shall prepare and present a draft Quarterly Report format at the Initial Coordination Meeting (paragraph 3.1.1). The Government will provide comments on this draft at the Final Management Plan meeting (paragraph 3.1.1) and the Contractor shall incorporate modifications provided by the Government prior to the first Quarterly Report delivery. The Contractor shall record and report detailed IPR minutes to the Government within two (2) working days after each IPR, and track all decisions and actions generated at the meetings.

3.12. **TASK 12. MEETINGS AND BRIEFINGS.** The Contractor shall attend various meetings concerning work performed under all tasks. Meetings under all tasks will be conducted concurrently. It is anticipated the Contractor will be required to attend two initial coordination meetings (five people, one day per meeting), four quarterly meetings (four people, one day per meeting), four meetings for HQDA GIS support (three people, five days per meeting), and up to two additional coordination meetings (four people, two days per meeting), in addition to travel for tasks as specified.

#### 4. ITEMS AND DATA TO BE DELIVERED.

TASK/DELIVERABLE	PARAGRAPH	DUE DATE (DAYS AFTER AWARD OF DELIVERY ORDER OR AS SPECIFIED)
Initial Coordination Meeting	3.1.1	10 Days
Draft Management Plan	3.1.2	20 Days
Final Management Plan/Management Plan Meeting	3.1.2	40 Days
Draft Evaluation Report	3.3.1	45 Days
Final Evaluation Report	3.3.1	75 Days
ITAM Tracking and Reporting	3.3.2	In conjunction with monthly and quarterly reports
GIS Data Development for Full Support ITAM Installations	3.4.1.1	10 Days, Continuous thereafter
GIS Data Acquisition for All ITAM Installations	3.4.1.2	10 Days, Continuous thereafter
Draft Map Layouts	3.4.2	60 Days
Final Map Layouts	3.4.2	80 Days

Map Production	3.4.2	10 Days, Continuous thereafter; 25% of Fort X Specials Per Quarter
Spatial Analysis	3.4.3	10 Days, Continuous thereafter
GIS Technical/Hotline Support	3.4.4	10 Days, Continuous thereafter
ITAM/NGB GIS Training Program Administration	3.5.1	10 Days, Continuous thereafter
Draft ITAM GIS Training Documents	3.5.2	60 Days
Final ITAM GIS Training Documents	3.5.2	90 Days
ITAM GIS Standards and Procedures Training for Installation GIS Technicians	3.5.2	30 Days after Government notifications
ITAM GIS Standards and Procedures Training for New Full OnSite GIS Technicians	3.5.1	30 Days after Government Notification
Update GIS Database and GIS Tracker for Full OnSite Installations	3.5.2	In conjunction with monthly and quarterly reports
ITAM GIS Repository	3.6	10 Days, Continuous updates and access thereafter
ITAM GI&S Website Functional Requirements Meeting	3.7.1	30 Days
Draft GI&S Plan	3.7.1	60 Days
Final GI&S Plan	3.7.1	90 Days
GI&S Website	3.7.2	180 Days
GI&S Website Database	3.7.3	180 Days
GI&S Website Administration	3.7.4	180 Days, monthly thereafter
Draft Military Installation Map Tool and Template Plan	3.8.1	45 Days
Final Military Installation Map Tool and Template	3.8.1	120 Days
MACOM GIS Support	3.9.1	10 Days, Continuous thereafter
HQDA Map and Analysis Support	3.9.2.1	10 Days, Continuous thereafter
Workshop Support	3.9.2.2	RTLP: May 03; ESRI: July 03; ITAM; Aug 03; ESRI DUG: Nov 03; ITAM GIS UWG: Jan 04.
ATTACC LCM Draft Documentation	3.10.1	30 Days
ATTACC LCM Final Documentation	3.10.1	60 Days
ATTACC Data and LCM Analysis	3.10.2	1 June 2003
Final LCM MC Analysis	3.10.2	1 July 2003

ATTACC LCM AAR	3.10.3	30 November 2003
LCM Training	3.10.4	August 2003, ITAM Workshop
Draft Monthly Status Report Format	3.11.1	10 Days, Revision prior to first MSR
Monthly Status Reports	3.11.1	30 Days, Monthly thereafter
Monthly Conference Calls	3.11.1	2 Days after each MSR, Monthly
Draft Quarterly Report Format	3.11.2	10 Days, Revisions 40 Days at Final Management Plan Meeting
Quarterly Reports	3.11.2	90 Days, Quarterly thereafter
Quarterly In-Progress Reviews	3.11.2	7 Days after each Quarterly Report, Quarterly

5. **GOVERNMENT FURNISHED PROPERTY AND ASSISTANCE.** All data required, used, or otherwise handled remains the property of the installation or agency that provided it. The Contractor may not use datasets, maps, analysis, briefings or other materials relating to this contract for publication without the express written consent of USAEC and the owning installation or agency. The Contractor shall contact the owning installation or agency to discuss data manipulations and authorship prior to conducting data analysis with the intent of publication. The Contractor shall make available to USAEC and to the owning installation or agency draft copies of any publications, based on work conducted or data collected under this contract, for their review and comment. In order to accomplish the tasks defined in this scope of work, the Government will provide the following information and equipment:

- 5.1. Office space, and telephone and network access for up to six people at the Fort A.P. Hill ITAM office.
- 5.2. The Government will provide access to all relevant geospatial data sets for installations supported under this delivery order. The installation ITAM POC and GIS Technician will serve as the primary points of contact to gain access to data for Partial support installations, and the AEC COTR will provide access to Full support installations and other data.
- 5.3. The Government will provide input on priorities for identified work, guidelines on ITAM GIS program requirements and application specifications, points of contact for supported installations, and coordination for schedules of site visits.
- 5.4. The Government will provide copies of all identified source materials referenced in this delivery order.

6. **POINTS OF CONTACT.** The Points of Contact for work under this delivery order are as follows:

COR

Kim Michaels, AEC-RDS  
Ph 410-436-1504

GIS Technical POC

Paul Dubois, AEC-RDS

Ph 703-693-0542

GIS Task Manager

Jim Furlo, AEC-RDS

Ph 410-436-1505

ATSC and ATTACC POC

Billy Karnes, ATSC

Ph 757-878-3090

AEC Information Management

Barbara Schmidt, AEC-IERD

Ph 410-436-6340

Fort A.P. Hill Installation Support Agreement (ISA) POC

John Phillips

Ph 804-633-8752

7. **PERIOD OF PERFORMANCE.** Work under this task shall be 12 months from date of award, including submission of all required data and reports.
8. **PROPOSAL FORMAT.** Proposals submitted by the contractor shall comply with the attached format.

### **Standardized Task Order Proposal Format**

All Task order proposals must comply with the following format. Do not include additional information. If more detailed information or data is required it will be requested. The purpose of the standardized format is to minimize parroting of task order requirements, increase the description of the proposed methods for accomplishing the proposed work, and to provide a standardized basis for comparing proposal efforts. The desired end state is that proposals are shorter, more concise, and provide Government POC's improved information for the proposal review and selection process.

### **Company Name**

CONTRACT NUMBER: DAAD13-00-D-5002 or DAAD13-00-D-5003

TASK ORDER NUMBER:

DATE:

TITLE:

TOTAL PROPOSED TASK ORDER COST:

PROPOSAL POINT(S) OF CONTACT/ADDRESS/PHONE/EMAIL:

TASK ORDER POINT(S) OF CONTACT/ADDRESS/PHONE/EMAIL: (If different than above)

**Technical Proposal (Submit in Microsoft Word Format)**

**Part A. Technical Approach.** Describe as appropriate the methodology proposed to comply with the technical requirements of the SOW. Include, as applicable, the specific tools, software, DOD-approved standards and regulations that are required, and other resources that would be used. Include any required GFE/GFI. Describe any apparent risks and actions to be taken to minimize the risk.

**Part B. Management Approach.** Describe as appropriate roles and responsibilities of personnel directly or indirectly supporting the task order. Include a description of project management organization including the planning and staffing requirements for the project, and/or project management procedures that are to be applied. Describe as appropriate the management controls including project manager oversight, resource allocations and control, problem resolution techniques, and handling of unanticipated contingencies. Describe the quality assurance/quality control methodology that will be used to ensure compliance with DOD-approved standards and regulations, quality products, on time, and within budget. Include, as appropriate to the content and structure of the proposal, the following:

1) Milestones: Describe the milestones proposed for accomplishing the TO subtasks.

2) Personnel: For each subtask in the TO, list each proposed labor category(ies) and the number of hours for each labor category. Justify use of one-time, unique labor categories.

**Part C. Past Performance and Experience.** A discussion of experience involving projects that have (or had) similar requirements. Include resumes of proposed personnel use format provided in the basic contract RFP. Personnel must be proposed for on-site professional service Task Orders. Include letters of commitment for proposed personnel that are not current employees.

**Cost Proposal (Submit in Microsoft EXCEL Spreadsheet format)**

**Part A. Direct Labor Costs:**

<u>Labor Category</u>	<u>Rate</u>	<u>Hours</u>	<u>Total</u>
_____	\$ _____	_____	\$ _____
_____	\$ _____	_____	\$ _____
_____	\$ _____	_____	\$ _____



Sub Total        \$ \_\_\_\_\_

Overhead (if applicable) on Direct Labor

% \_\_\_\_\_        Total (based on above) \$ \_\_\_\_\_

Direct Labor        Grand Total \$ \_\_\_\_\_

Part B. Other Direct Costs:

Travel (Attach Breakdown)        \$ \_\_\_\_\_

Training (Attach Breakdown)        \$ \_\_\_\_\_

Materials & Supplies (Attach Breakdown)        \$ \_\_\_\_\_

Other (Describe) (Attach Breakdown as required)        \$ \_\_\_\_\_

Subtotal ODCs        \$ \_\_\_\_\_

Overhead % (If applicable)        \$ \_\_\_\_\_

Grand Total ODCs:        \$ \_\_\_\_\_

Part C. Fee (CPFF only)

% \_\_\_\_\_        Total Fee        \$ \_\_\_\_\_

Part D. **Total Task Order Proposed Costs**        \$ \_\_\_\_\_